

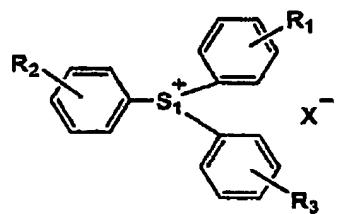
Appl. No. 10/648,579
Reply to Office Action of March 17, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

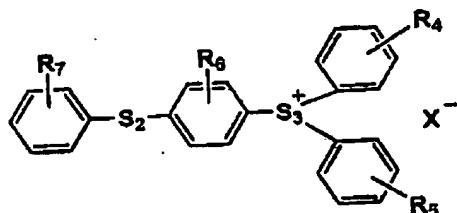
Listing of Claims:

1. (Currently amended) An actinic radiation curable composition, comprising a photopolymerizable monomer and a photo-acid generating agent selected from the group consisting of compounds represented by General Formulas (I) -(III):

General Formula (I)

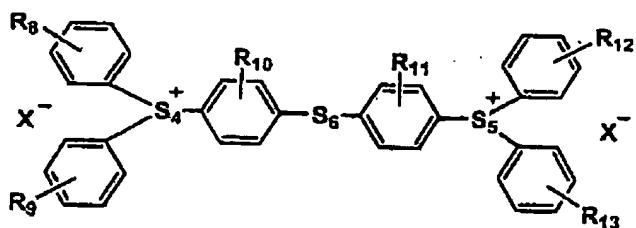


General Formula (II)



Appl. No. 10/648,579
 Reply to Office Action of March 17, 2005

General Formula (III)



wherein R₁ - R₁₃ each represents a hydrogen atom or a substituent selected from the group consisting of an alkyl group, a halogenated alkyl group, an alkoxy group, a carbonyl group, a phenylthio group, a halogen atom, a cyano group, a nitro group and a hydroxy group, provided that R₁ - R₃, R₄ - R₇ and R₈ - R₁₃ do not represent a hydrogen atom at the same time,

S₁ - S₆ each represents a sulfur atom, a maximum bond distance between S₁ and the adjacent C atom in General Formula (I), a maximum bond distance between S₃ and the adjacent C atom in General Formula (II), a maximum bond distance between S₄ and the adjacent C atom and a maximum bond distance between S₅ and the adjacent C atom in General Formula (III), are 0.1686 - 0.1750 0.1688 - 0.1750 nm, respectively, and X represents a non-nucleophilic anion group.

Appl. No. 10/648,579
Reply to Office Action of March 17, 2005

2. (Currently amended) The actinic radiation curable composition of claim 1, comprising [[a]] the photopolymerizable monomer having an oxetane ring in the molecule.

3. (Currently amended) The actinic radiation curable composition of claim 1, comprising [[a]] the photopolymerizable monomer having an oxirane group in the molecule.

4. (Original) The actinic radiation curable composition of claim 1, comprising the following photopolymerizable monomers

- (a) a compound having at least one oxetane ring in the molecule in an amount of 60 - 95 weight percent;
- (b) a compound having at least one oxirane group in an amount of 5 - 40 weight percent; and
- (c) a vinyl ether compound in an amount of 0 - 40 weight percent,

each weight percent being based on the total weight of the composition.

Appl. No. 10/648,579
Reply to Office Action of March 17, 2005

5. (Original) The actinic radiation curable composition of claim 1, comprising the following photopolymerizable monomers:
(a) a compound having one oxetane ring in the molecule; and
(b) a compound having at least two oxetane rings in the molecule.

6. (original) The actinic radiation curable composition of claim 1, having a viscosity of 7 - 50 mPa·s at 25°C.

7. (Currently amended) The actinic radiation curable composition of claim 1 which is an ink-jet ink and further comprises comprising a pigment.

8. (Withdrawn) An image forming method using the actinic radiation curable ink of claim 7, comprising the steps of:
(a) jetting a droplet of the ink from a nozzle of an ink-jet recording head to form an image onto a recording material; and
(b) irradiating the image with an actinic ray,
wherein the irradiation step is carried out between 0.001 and 2.0 seconds after jetting the droplet of the ink.

Appl. No. 10/648,579
Reply to Office Action of March 17, 2005

9. (Withdrawn) An image forming method using the actinic radiation curable ink of claim 7, comprising the steps of:

- (a) jetting a droplet of the ink from a nozzle of an ink-jet recording head to form an image onto a recording material; and
- (b) irradiating the image with an actinic ray, wherein after the irradiation step, a thickness of the ink on the recording material is 2 - 20 μm .

10. (Withdrawn) An image forming method using the actinic radiation curable ink of claim 7, comprising the steps of:

- (a) jetting a droplet of the ink from a nozzle of an ink-jet recording head to form an image onto a recording material; and
- (b) irradiating the image with an actinic ray,
wherein a volume of the droplet of the ink jetted from the nozzle is 2 - 15 pl.

11. (Withdrawn) An ink-jet recording apparatus for the image forming method of claim 8, wherein the actinic radiation curable ink and the recording head is heated to 35 - 100°C before the jetting step is carried out.

Appl. No. 10/648,579
Reply to Office Action of March 17, 2005

12. (New) The actinic radiation curable composition of claim 1, wherein the substituent of R₁ - R₁₃ is selected from the group consisting of a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, a t-butyl group, a pentyl group, a hexyl group; a trifluoromethyl group, a difluoromethyl group; a methoxy group, an ethoxy group, a propoxy group, a butoxy group, a hexyloxy group, a decyloxy group, a dodecyloxy group; an acetoxy group, a propionyloxy group, a decylcarbonyloxy group, a dodecylcarbonyloxy group, a methoxycarbonyl group, an ethoxycarbonyl group, a benzyloxy group; a phenylthio group; fluorine, chlorine, bromine, iodine; a cyano group; a nitro group; and a hydroxy group.